OHEC
370.7309713
059DE/R

SYLLABUS

OF

Studies and Regulations

FOR

The Normal Schools

AT

Hamilton, London, Ottawa, Peterborough, Stratford and Toronto.

Session of 1908-1909.

TORONTO:
Printed by L. K. CAMERON, Printer to the King's Most Excellent Majesty,
1908.

Cir. 23
2,000, July, 1908.

WARWICK BROS & RUTTER, Limited, Printers,
TORONTO.

THE NORMAL SCHOOLS OF ONTARIO.

SESSION OF 1908-1909.

THE PURPOSE

1.—(1) The purpose of the
the Second Class, in the the
ing, and instructing the pup
and to improve the general culture of such teachers, and, in particular, their academic preparation for teaching the subjects prescribed in the programme of studies.

(2) The Normal Model Schools, the Model affiliated Public Schools, and the affiliated Rural Schools, are used, as required, to afford the teachers-in-training adequate means of observing well-conducted Schools, and of securing practice in teaching, discipline, and management.

Note.—The Normal School at North Bay will not be completed until next year.

GRADES OF TEACHERS-IN-TRAINING.

2. There shall be two grades of teachers-in-training:

GRADE A.—Those who hold professional Third Class certificates with at least Junior Teachers' academic (non-professional) standing and have taught successfully a Public or a Separate School for one year, or for six months under the supervision of the Inspector of a city where there has been a Model School.

GRADE B.—All others who hold Junior or Senior Teachers' academic certificates or who pass in 1908 the full examination for entrance to the Faculties of Education or to the Normal Schools.

SESSION AND VACATIONS.

3.—(1) The Session of the Normal Schools for 1908-1909 will begin on the third Tuesday in September at 9 a.m. and will end on a date in April, to be hereafter settled, for those teachers-in-training of Grade A. who may then qualify for Second Class certificates, and on the third Friday in June for all others.

(2) There shall be two vacations as follows:

(*a*) At Christmas, beginning on December 18th, 1908, and ending on January 4th, 1909; and

(*b*) At Easter, beginning on the Thursday before Good Friday and ending on the Monday following Easter Monday.

Conditions of Admission.

(1) *Application to the Deputy Minister.*

4. Application for admission shall be made to the Deputy Minister of Education not later than the second Tuesday of September on a form to be supplied by him. Each applicant shall send with this application:

(1) A certificate from competent authority that he will be at least eighteen years of age before the close of the session;

(2) In the case of Grade A., his academic and professional certificates and his certificate or certificates of successful experience; and, in the case of Grade B., his Junior or Senior Teachers' academic certificate, or his certificate of having passed the examination for entrance into the Faculties of Education or the July examination for entrance into the Normal Schools;

(3) A deposit of $5, which will be returned to the teacher-in-training in the month of October, but which will be forfeited if the applicant fails to attend without giving satisfactory notice of withdrawal before the opening of the School.

(2) *Appplication to the Principal.*

5.—(1) In addition to the card of admission obtained from the Deputy Minister, and the certificates required in 4, (1) and (2) above, each applicant, on presenting himself at a Normal School, shall submit to the Principal thereof:

(*a*) A certificate from a clergyman or other competent authority that he is of good moral character;

(*b*) A certificate in detail from a physician that he is physically able for the work of a teacher, and especially that he is free from serious pulmonary affection and from seriously defective eyesight or hearing.

(2) The three following classes of applicants shall be admitted without further examination:

(*a*) Applicants who present the professional certificate and the certificate of successful experience entitling them to be members of Grade A;

(*b*) Other applicants who hold a full Junior or Senior Teachers' Academic Certificate.

(*c*) Applicants who present a certificate of having passed the July examination of 1908 for entrance into the Normal Schools, having endorsed thereon the prescribed certificate from the Principal of an Approved School that the applicant has completed satisfactorily the Lower School subjects of the High School prescribed for entrance into the Normal Schools.

(3) Other applicants who present a certificate of having passed the July examination of 1908 for entrance into the Normal Schools, having endorsed thereon a certificate from the Principal whose school they attended, that they have completed satisfactorily the

Reading, Book-keeping and Business Papers, Art, and Elementary Science of the Lower School course of the High Schools, shall be admitted on passing at the Normal School an examination in the Geography, English Grammar, and Arithmetic and Mensuration of the Lower School of the High Schools, in accordance with the following time-table, the pass standard being 40 per cent. of the marks for each paper and 60 per cent. of the aggregate:

Tuesday, Sept. 15th, 9.30-11.30 a m., Geography.

Tuesday, Sept. 15th, 1.30-3.30 p.m., English Grammar.

Wednesday, Sept. 16th, 9.00-11.00 a.m., Arithmetic and Mensuration.

Duties of Principals and Assistants.

6.—(1) Subject to the regulations and to the approval of the Minister of Education, the Principal of each Normal School shall prescribe the duties of his staff and shall be responsible for the efficiency of the Normal School and the Model School.

(2) The Assistant Masters of each staff shall be subject to the authority of the Principal.

(3) Each Normal School Master shall, in company with the Public School Inspector, spend one week each year visiting the rural schools in the district in which the Normal School is situated. He shall submit a report of his observations for the consideration of the whole staff of the Normal School.

Duties of Teachers-in-Training.

7.—(1) Teachers-in-training shall board and lodge at such houses only as are approved of by the Principal.

(2) They shall attend regularly and punctually, and shall submit to such discipline and directions as the Principal may prescribe.

(3) Teachers-in-training who, in the opinion of the staff, are unduly defective in scholarship, or whose conduct or progress is unsatisfactory, may be dismissed by the Principal at any time during the session from further attendance at the Normal School.

(4) *All applicants are strongly advised to review carefully before entering, the work of the Lower School of the High Schools.*

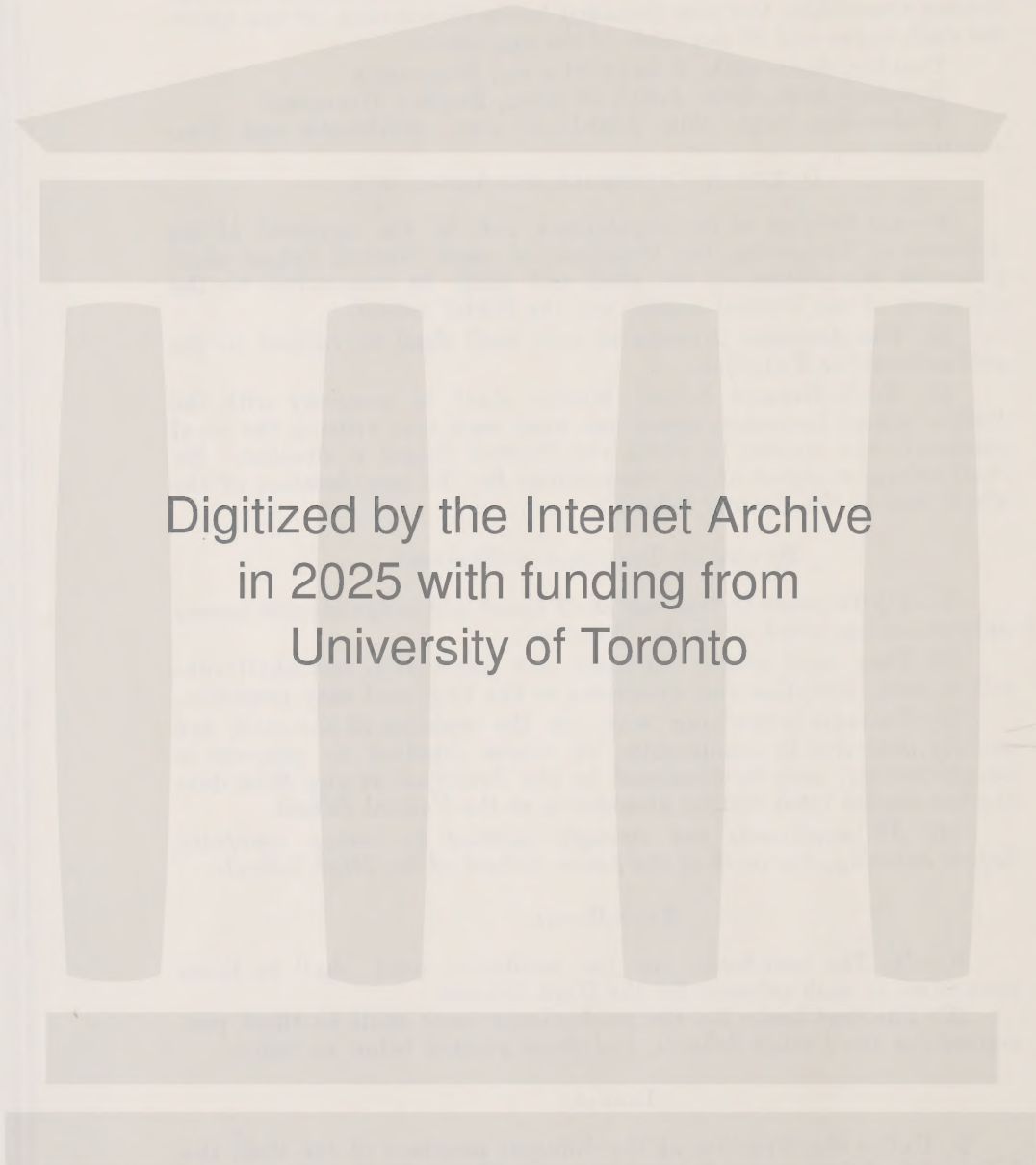
Text-Books.

8.—(1) The text-books for the academic work shall be those prescribed in such subjects for the High Schools.

(2) The text-books for the professional work shall be those prescribed for the Public Schools, and those printed below in italics.

Library.

9. Under the direction of the different members of the staff, the Library shall be constantly used for consultation by the teachers-in-training. To this end it contains a supply of books of general literature, and a sufficient number of copies of each of the most important professional books of reference, a list of which is given in this Syllabus.



Digitized by the Internet Archive
in 2025 with funding from
University of Toronto

https://archive.org/details/syllabusofstudie00onta_0

Literary Society.

10. A Literary Society for general culture and for professional advancement shall be established in each Normal School, and shall be fostered by the staff as an important part of the Course of study. It should begin immediately after the work of organization has been completed, and should meet once each week until the special preparation for the final examination begins. The programmes should include essays, debates, recitations, and the reproduction of suitable scenes from standard plays. Suitable lecture courses also will be arranged for with the concurrence of the Minister of Education.

Examinations.

Subjects and Values.

11.—(1) (*a*) The final standing of the teacher-in-training shall be determined on the combined results of his Sessional records and his prescribed examinations.

(*b*) In addition to oral and written class tests in each subject, and the Observation and Practice-teaching records, there shall be a written examination in the subjects of Groups I. and II. below, immediately before the Christmas vacation.

(*c*) There shall be two Final written examinations (including the Supplementals), one in April for the teachers-in-training belonging to Grade A.; and one at the close of the Session in June for the teachers-in-training belonging to Grade B., and for those of Grade A. who fail to qualify in April.

(*d*) Each of the April and June examinations shall be based on the work preceding it. The Final Examination papers in Groups I. and II. shall be uniform for all the Normal Schools, and shall be based upon the courses as laid down in this Syllabus.

(*e*) The examinations in Group II. and III. shall include a thorough test of the academic qualifications of the teacher-in-training for teaching all grades of Public School work.

(2) At each examination in Groups I. and II. there shall be one paper in each of the following subjects, and the maximum marks for each subject shall be as follows (the marks for the Christmas examination and for the Sessional Records in each subject being each one-fifth of the maximum):—

Group I.

Professional. Science of Education, 300; History of Education, 200; School Organization and Management, 200.

Group II.

Academic and Professional. Arithmetic, Algebra and Geometry, Literature, Grammar, History, Composition, Geography, and Nature Study and Elementary Science, each 150.

Group III.

(3) The marks counted in estimating the final standing of the teacher-in-training in the following subjects shall be those awarded him during the Session, more especially towards the close thereof, for the oral, written, and practical tests in matter and, where applicable, in method, the maximum for each subject being as follows:—

Academic and Professional. Art, Music, Reading, Spelling, and Writing and Book-keeping, each 100; Manual Training, Household Science, Physical Training, and Physiology and Hygiene, each 75; Manners, and School Law and Regulations, each 50.

Group IV.

(4) The marks counted in estimating the final standing of the teacher-in-training in Observation and Practice-teaching shall be those awarded him in these subjects during the Session and more especially towards the close thereof, after an introductory course of lessons in each. The maximum marks for Practice-teaching shall be 1,200, and those for Observation lessons 200.

CERTIFICATES.

12.—(1) (*a*) A teacher-in-training belonging to Grade A., who, at the April final examination, obtains 40% of the marks in each subject of each group, 60% of the marks for Group IV., and 60% of the aggregate of the marks, may, on the recommendation of the staff, be awarded a permanent Second Class certificate, provided he is then twenty-one years of age; or an interim certificate valid until he reaches that age, when a permanent certificate will be issued on application.

(*b*) A teacher-in-training, belonging to Grade A., who fails at the April final examination shall be required to attend the rest of the Session.

(2) (*a*) A teacher-in-traning, who, at the June final examination, obtains 40% of the marks in each subject of each group, 60% of the marks for Group IV., and 60% of the aggregate of the marks, may be awarded an interim Second Class certificate, which will be made permanent at the end of two years' successful experience, duly certified on an official form by the Inspector concerned, provided the teacher is then twenty-one years of age.

(*b*) A teacher-in-training who, at the June final examination, makes less than 60%, but at least 55% of the aggregate of the marks, and who passes in Group IV. and in each subject of the other groups, may, on the recommendation of the staff, be awarded a Third Class certificate valid for one year.

(*c*) A teacher-in-training who, at the June final examination, makes at least 60% of the total and passes in Group IV., but who fails in not more than three of the subjects of Groups I., II., and III., may, on the recommendation of the staff, be awarded a Third Class certificate valid for one year.

(*d*) After one year's successful teaching, duly certified on an official form by the Inspector concerned, and after passing a supplemental examination with at least 60% in each of the subjects in which the staff has reported him as insufficiently prepared, a teacher-in training, qualified as in (2) (*b*) immediately preceding, may be awarded an interim Second Class certificate valid for one year.

(*e*) After one year's successful teaching, duly certified on an official form by the Inspector concerned, and after passing a supplemental examination with at least 60% in each of the subjects in which he originally failed, a teacher-in-training, qualified as in (2) (*c*) immediately preceding, may be awarded an interim Second Class certificate valid for one year.

(*f*) A teacher-in-training whose final standing in June is less than 55% of the aggregate of the marks, or who has obtained less than 60% of Group IV., shall be required to attend a Normal School for another year.

(*g*) After one year's successful teaching, duly certified on an official form, by the Inspector concerned, a teacher who holds a certificate obtained under (*d*) or (*e*) immediately preceding, may be awarded a permanent certificate provided he is then twenty-one years of age.

(*h*) An Interim Second Class certificate which expires before the teacher is twenty-one years of age may be renewed until that date on the recommendation of the Inspector concerned.

(3) Candidates who are exempt from attendance at a Normal School and who are actually engaged in teaching, may take Groups I., II., and III., at the same examination or at different examinations, and shall be exempt from an examination in Group IV., provided they submit to the Department of Education a certificate from their last Inspector that they have taught successfully. The pass standard shall be 40% of the marks for each subject and 60% of the aggregate for the group or groups taken at each examination.

Programme of Studies.

At the Normal Schools.

13.—(1) The courses at the Normal Schools shall consist of the following:

(*a*) A review of the Public School course and of the academic subjects prescribed for admission into the Normal Schools, especially those of the Lower School, from the standpoint of pedagogy and the requirements of the Public and Separate Schools, with such an extension of said subjects for the purpose of culture as time will permit; also special instruction in Reading, Writing, Art, Physical Training, Physiology and Hygiene, Music, Household Science, Manual Training, Manners, School Law and Regulations.

(*b*) The Science of Education, including Applied Psychology and Ethics, Child Study, and General Methodology; the History of Education; Special Methodology; and School Organization and Management.

(*c*) Supervised Observation in the Model Schools, also in the affiliated Rural Schools of the adjoining county or counties.

(*d*) Supervised Practice teaching in the Model Schools.

(2) (*a*) For teachers-in-training of both Grades A. and B. the main details of the courses shall be the same. The provision in Reg. 15 below refers to Grade B. The courses for Grade A. shall be more intensive than those for Grade B.

(*b*) *Teachers-in-training belonging to Grade A. will be assumed to have made themselves familiar with Bett's "The Mind and its Education," and McMurry's "The Method of the Recitation," before entering the Normal School.*

At the Ontario Agricultural College, Guelph.

14.—(1) Beginning next April at a date to be settled hereafter, a course of about three months will be provided at the Ontario Agricultural College, Guelph, in Agriculture and Horticulture and in Elementary Industrial Training, with concurrent discussion of methods, supplementary to the courses in these subjects in the Normal Schools, for teachers-in-training who passs the April Examination for Second Class certificates. The object of the courses is to provide duly qualified teachers for the Public and Separate Schools in—

(*a*) Elementary Agriculture and Horticulture; and

(*b*) Elementary Industrial Training, including Mechanical Drawing with and without instruments, the making and use of blue prints, and bench-work and designing.

(2) The above courses at the Agricultural College are optional, and teachers-in-training may take either, but not both.

Note.—A circular containing the details of the courses and the regulations connected therewith will be issued at an early date, and may be obtained on application to the Deputy Minister.

ORDER OF THE COURSES AT THE NORMAL SCHOOL.

15.—(1) In order that the teacher-in-training may begin early the Observation work and the Practice-teaching, the following introductory courses shall be taken up in the following order, having due regard to the requirements of Grades A. and B. respectively:

(*a*) The Introduction to the Science of Education (pp. 12-13), and those parts of the Applied Psychology and Ethics, and Child Study which bear most directly upon General Methodology, the prime essentials of which shall be discussed in this connection. To this course shall be added a discussion of the functional value of each of the Normal School courses.

(*b*) A course of Observation in the different forms of the Model Schools.

One lesson a day shall be given in the course in (*a*); the total number being about twenty-five; and the number of introductory Observation lessons not exceeding ten.

(2) To prevent the dissipation of energy which would result from the concurrent study of a large number of subjects diverse in content, the system of intensive study should be followed so far as the

special qualifications of the members of the staff will permit. In the order of the courses and the grouping of the subjects, due regard should be had to the character of each subject and its natural relations, and to the logical development of the courses and their relative functional value in the pedagogy of the Public School programme. When a subject has been finished, it should from time to time be reviewed with a further extension of the most important parts, having due regard to its character and importance.

(*a*) On the professional side, after the completion of the Introductory Course [15 (1)], the course in the Science of Education should be taken up three times a week until finished. The course in School Organization and Management should be taken up from the first three times a week until the Science of Education is finished. It should then be taken once a week, the other two periods being given to the History of Education.

(*b*) The total number of periods for each of the professional subjects should be as nearly as practicable as follows:

The Science of Education, including the Introductory course, 70; School Organization and Management, 60; the History of Education, 32; Manners, and School Law and Regulations, 10.

(*c*) The number of lessons per week for each of the professional and academic subjects shall be, as nearly as practicable, as follows: Mathematics, 3; English (Grammar, Literature, History, Language and Composition, Spelling, and Reading), 7; Science (Physics, Chemistry, Biology, Geography, and Physiology and Hygiene), 5; Art, 2; Music, 2; Manual Training, 1½; Physical Training, 1; Writing and Book-keeping, 1; Domestic Science, 1½; Literary Society, 1; Observation and Practice-teaching (minimum), 4; Religious Instruction, 1.

(3) The foregoing principles of selection and order should also be observed in the Special Methodology and the academic treatment of the other subjects of the course:

(*a*) In the Mathematical group, Arithmetic should be taken up before Algebra and Geometry, being taken three times a week for about the first five months. It should then be continued with one lesson a week to the end of the session, the other two periods being given to Algebra and Geometry.

(*b*) The subjects of the groups, Geography and History; Language, Grammar, and Composition; and Phonics, Voice Culture, and Reading should respectively be related in organization as are the subjects of the mathematical group; Geography, Language and Grammar, and Phonics and Voice Culture preceding in their respective groups.

(*c*) In the Science group, the Biological side should be given special attention during the Autumn and the Spring, and the Science subjects should be taken up first from the Nature Study point of view. On account of their relations to parts of the courses in Art, Domestic Science, and School Management, suitable introductory courses bearing directly on these subjects should be provided in Chemistry and Physics. So, too, on account of its basal relations to Psychology, Physical Training, Music, and School Management, the course in Physiology should be taken up at the beginning and completed as soon as practicable.

(*d*) The courses in Music, Art, Writing, Physical Training, Literature, Manual Training, and Domestic Science should continue throughout the session.

(*e*) Short courses should be provided at the beginning of the session in Spelling and Manners; and, towards the close, in School Law and Regulations.

OBSERVATION AND PRACTICE TEACHING.

16.—(1) The Introductory Courses provided for in Regulation 15 shall be followed by systematic Observation and Practice-teaching, the minimum number of Observation lessons being 40 and of Practice-teaching lessons 25, but these numbers shall each be increased to meet the necessities of individual teachers-in-training.

(2) (*a*) The teachers-in-training shall be divided into suitable groups, and the work of Observation and Practice-teaching shall be taken up systematically per time-table arranged from time to time.

(*b*) At least that group to which the teacher-in-training belongs shall be present at the discussions on his Observation and Practice-teaching lessons.

(3) (*a*) The Observation and Practice-teaching lessons for each teacher-in-training shall, as far as practicable, be arranged so as to cover the work of the Public Schools in all subjects and in all grades.

(*b*) The Observation and Practice-teaching lessons provided for in the logical development of the Normal School course shall be supplemented by other lessons in such forms of the Model School as may be available.

(*c*) Continuous practice-teaching for several periods towards the end of the course shall be required, the teacher-in-training being wholly responsible for the discipline of the class.

(*d*) Teachers-in-training shall be available as substitutes in the Public or Separate Schools of the locality (urban or rural) in which the Normal School is situated, subject to arrangement with the Principal of the Normal School.

(4) (*a*) Teachers-in-training shall be notified by the Principal, of the subject and the scope of the Observation lesson, and shall prepare the lesson beforehand.

(*b*) After observing the lesson, they shall submit a report upon it to the Model School teacher concerned.

(5) (*a*) Teachers-in-training shall be notified of the subject and the scope of the Practice-teaching lesson, by the Model School teacher after consultation with the Normal School Master concerned.

(*b*) Teachers-in-training shall prepare a plan of each Practice-teaching lesson for submission to the Model School teacher concerned.

(6) (*a*) Model lessons shall be taught by the teachers of the Model School in accordance with the regular programme of the Model School.

(*b*) The Normal School masters in charge of the academic work in a subject shall develop its details in their teaching order, and, after each suitable step, shall also themselves teach model lessons in spe-

cial Public School classes in the Normal School and in the Model School itself. At these lessons, the Mode School teacher in charge of the subject shall be present.

(7) (*a*) The necessary applications of the Science of Education and of Special Methodology shall be made systematically by both the Normal School Masters and the Model School teachers in connection with the Model and the Observation lessons and the Practice-teaching; so that the course may be taken up in terms of the child's mind and growth. From time to time the Master in charge of the Science of Education should formally illustrate by actual teaching the principles he has discussed in class.

(*b*) As far as practicable, it shall be the duty of the members of both the Normal School and the Model School staffs, in accordance with the time-table, to be present at the Observation lessons and Practice-teaching of the teacher-in-training and to make jointly the criticism and the valuation of his work.

(8) *Concerted work on the part of the Normal and the Model School shall be secured by frequent conferences of the staffs of both schools, especially at the beginning of the session.*

Science of Education.

17. The object of the course in the Science of Education is to provide the teacher with a working conception of the nature of education which will be useful to him in forming ideals and determining procedure, to give him a rational basis for intelligently evaluating and selecting subject-matter and methods of instruction, and to improve natural tact and skill through the acquisition of experience, with the least expenditure of time and energy. The course, which shall be as *practicable* as possible, includes Applied Psychology and Ethics, Child Study, and General Methodology.

Note.—The course in the Science of Education is given in greater detail than any of the others, in order to secure the desirable degree of uniformity in the different Normal Schools, in the treatment of a subject which covers so much ground and the details of which have not yet been authoritatively delimited.

I. *Introduction.*

18. *The Aim of Education*: Possibility of education dependent on the capacity of the child to profit by his own past experience and by the experiences of the race; process of education as the development of experience into experience; basis for determining the direction along which the development of experience should take place; social and individual aims in education; statement and criticism of the chief current definitions of education; provisional statement of the aim of education to be used as a working definition.

Function of the School: Distinction between formal and informal education; some forms of informal education; the school as a specialized agency of formal education; functions of the school in directing the development of the child's experiences during the plastic period; relation of the school to other social institutions, the home, the church, the state, the vocation.

Subjects of Study: School studies as typical forms of experience that the race has found valuable in meeting its needs; basis for determining the functional value of a subject in a course of study; principles of correlation and concentration of studies.

Methods of Instruction: The purpose of method as a guide in controlling the development of experience; the development of experience as a process of natural growth; necessity for basing methods of instruction on a knowledge of the characteristics and the conditions of mental life; the problem of method a psychological problem.

II. *Applied Psychology and Ethics.*

19. *Problems and Methods of Psychology*: The subject-matter of psychology; the essential characteristics of mental life; contrast between mental and physical phenomena; "stream of consciousness" and its "contents"; knowing, feeling, and willing; their interdependence.

Methods of studying the facts of mental life; the meaning of introspection; the limitations of introspective methods; methods of observing and interpreting the expressive signs of mental life; the attitude of the teacher as an observer; the place of experimental methods.

Nervous System and Mental States: Body and Mind, general nature of their connection; illustrations to show that mental life is dependent on physical conditions; outline study of the structure and functions of the nervous system in so far as it is related to mental processes; relation of mental growth to the development of the nervous system; conditions of sensory and motor development, development of the nerve centres through natural growth and through use; effects of disuse on nerve cells; connection between sensory and motor action; development of nerve connections; the "reflex arc"; automatic and reflex acts; the process of the growth of motor control; importance of a knowledge of the growth of the nervous system to the teacher.

Instincts: The place of natural tendencies in the development of mental life; the nature of instincts; outline study of some of the more important human instincts; transitory character of many instincts; necessity for utilizing instinctive tendencies at the time of their appearance; the adaptation of the subject-matter of instruction to the stage of natural development of the child; the dangers of introducing subjects too soon or too late; useful and injurious instincts; methods of strengthening and modifying instincts through use, and of weakening or eliminating them through disuse, substitution or repression; transformation of instincts into habits.

Habit: Nature of habit; physical basis of habit; the functions and limitations of habit; the dangers of mental "fossilization"; times of rapid habit formation; the relation of habit formation to school studies, especially those involving the acquisition of skill, such as writing, reading, manual training, art, etc.; pedagogical rules for the formation of new habits or the breaking up of old ones.

Interests: The nature of interests; interests as tendencies to thought and action.

Interests as an end to be sought in education; the importance of the cultivation of desirable and the suppression of undesirable tendencies; instinctive interests; a classification of the more common instinctive interests, their interpretation; basis for determining the relative values of instinctive interests; the relation of acquired to instinctive interests; the perpetuation of old interests through repeated response to the stimuli which arouses them; interests strengthened through the feeling of satisfaction which accompanies response; the growth of new interests: (*a*) as the natural development of old interests, (*b*) through the tendency to imitate, (*c*) through the development of knowledge; the reciprocal character of knowledge and interest.

Interest as a means in education; tendencies as the starting points in acquisition of knowledge or the formation of habits of action; practical teaching rules for applying the principle of interest in gaining knowledge; the relation of interest to effort; distinction between the interesting and the easy, and between the interesting and the pleasurable.

Capacities and Activities: Examination of some of the more fundamental capacities:

Sensitivity: The relation of sense impressions to the growth of knowledge. Retentiveness: The importance of retention in the growth of experience; conditions of retention. Relating activity: First steps in thinking; dissociation, discrimination, and association as activities; learning as an analytic-synthetic process. Expression: Process of giving significance to motor movements; relation of impression to expression.

The development of capacities through experience; the place of formal discipline as an end in education.

Apperception: Mental states or acts as dependent on original tendencies and previous experience; the development of mental life as conditioned on the interaction of the "old" and the "new"; learning as the development of experience into experience; necessity for making experiences meaningful; the process of interpreting the new in terms of the old; the selection of the old determined by the needs of the learner; the relation of meaning to tendencies and aims; the meaning of "apperceptive systems"; the necessity for studying the child's tendencies and capacities in selecting and presenting the subject-matter of instruction; the utilizing of the contents of pupils' experience; significance of the pedagogical maxim, "proceed from the known to the related unknown"; "preparation" as a formal step in method; laws of mental assimilation.

Attention: The nature of attention; the selective character of attention; meaning of concentration of attention, dispersed attention and inattention; conditions of non-voluntary, or spontaneous attention; interests as tendencies to attention along particular lines; the relation of habit to attention; methods and devices for securing spontaneous attention through interest; the conditions of voluntary attention; growth of purpose and plans from natural interests; the importance of an aim on the part of the learner; the development of aims and ideals as an end in education; methods of securing voluntary attention; the application of the law of derived interest to school

studies; punishments and rewards as incentives to attention; the relation of voluntary to non-voluntary attention; gaining and holding attention; physical conditions favourable and unfavourable to attention.

Sensation and Perception: Sensation as a mental process; the physical conditions of sensation; classification of sensations; sensation qualities; the nature of perception; the presented and reproduced factors in perception; the functions of sensation and perception as forming the basis for thought; the development of perception; the growth of percepts in richness and definiteness through the detection of new features connected with old things; the meaning of observation; the relation of observation to alertness and keenness of sense activity and to knowledge, interests and purposes; methods of cultivating habits of observation; nature and functions of objective teaching; limitations of objective teaching; means of objective teaching; the rules for the conduct of school excursions and the use of museum collections, pictures, models, etc.

Imagination: Relation of imagery to sensory experiences; means of retention and utilization of past experience; the function of imagery in interpreting the present by the past and in forming aims, purposes, and plans; power of imagery as varying in different people; types of imagery; the reconstruction of images; reproductive and productive imagination; their relation to each other; simultaneous association of images, as in perception; successive association of images in the train of thought; laws of association; physical basis of association; training the imagination as involving the storing of the mind with a rich stock of usable images and giving facility and dexterity in grouping images into new wholes for the sake of a definite purpose; school studies and activities as a means of training the imagination; study of children for the purpose of determining the "mind stuff" in which they think.

Memory: The characteristic features of memory; the relation of memory to reproductive imagination; retention, recall and recognition as factors in memory; characteristics of a good memory; recency, vividness, frequency and association as factors in efficient recall, training of memory; cultivation of memory as improvement in methods of recording facts; methods of securing vividness of original impression; relation of attention to retention; rules for proper use of repetition; the function of the drill lesson; methods of securing association and organization; the function of the review lesson; methods of conducting the review lesson; cramming and its effects.

Thinking: The importance of consciousness of meaning in the development of mental life; meaning dependent on relations; thinking as the process of grasping relations; thinking of the child and the adult compared; analysis of conceptional thinking; nature and growth of a concept; the place of the image in conception; the relation of conception to language; judgment as a phase of thinking; the place of judgment in perception and conception; sound judgment as an end in education; reasoning as purposive thinking; deductive reasoning; inductive reasoning; the interrelation of induction and deduction; principles involved in training in thinking; school studies as a means

of training in thinking; inductive methods of teaching; "presentation," "comparison and abstraction," "generalization" and "application" as formal steps of instruction; use of types in inductive methods; deductive methods of teaching; the relation of the data, the principles, the inference, and the verification in the deductive lesson.

Feeling and Emotion: Various uses of the term feeling; feeling as the tone of a conscious state; qualities of feeling; relation of feeling; to cognition and to motor reaction; nature of emotion; relation of emotion to instinct and to feeling; conditions upon which the appearance of emotion depends; functions of feeling and emotion, their influences on attention, judgment and effort; outline study of some of the more significant emotions; directions along which emotional development should take place; place of habit in emotional development, the growth of moods, sentiments, temperaments, and dispositions; significance of school studies and activities in the growth of feeling and emotion.

Will: Involuntary and voluntary action compared; reflex action, instinctive action and ideomotor action; a voluntary act as the attentive selection of one way of action as against another; the place of deliberation, effort and choice in a voluntary act; factors in a well-balanced will; study of volitional types which vary from the normal, such as, the impulsive type and the obstructed will; relation of involuntary action to voluntary in the training of the will; methods of developing normal will through the activities of the school and the home; methods of dealing with abnormal types of will; education in its relation to conduct; elements involved in moral training; the function of the school in moral training; effects of methods of instruction on morals; moral effects of school studies; value of specific moral instruction; character development as the full aim of education; factors in character development; the function of the school in character development.

Practical Ethics: The application of the general principles governing conduct to the ordinary duties and activities of life.

Books of Reference:—

Betts: *The Mind and its Education*, $1.00.*
Angell: Psychology.*
Hyde: Practical Ethics.

III. *Child Study.*

20. The object of the course in Child Study is to enable the teacher-in-training to adapt intelligently his methods in each subject to the child's mind at the different stages of its growth. The course includes the following topics:—

The scope of Child Study; methods of investigation; importance to the teacher of the study of the child mind. Physical growth and development during infancy, childhood, and adolescence. Mental development during the same periods. Mental types and variations

* Teachers-in-training who already possess Angell need not provide themselves with Betts.

from normal mental conditions. Differences in individual children. The study of children along the lines suggested in the course in Applied Psychology.

Book of Reference:—

Kirkpatrick: Fundamentals of Child Study.

IV. *General Method.*

21. The object of the course in its final stage is to gather up the main facts and principles bearing most directly on methods of instruction which have been developed in connection with the various topics in Applied Psychology and Child Study; and, by dwelling on connections and relations, to organize the whole into a comprehensive and logical system of General Methodology [See 15 (1) (*a*)] and so to form a basis for the Special Methodology. The course includes the following topics:—

The Problem of General Method: The relation of general method to special methods and teaching devices; the relation of method to subject-matter.

Planning for the Lesson: Principles to be observed in dividing the subject-matter into topics or units of instruction; the adjustment of the lesson to the tendencies, needs and capacities of the pupils; the relation of the lesson to previous work and to the stage of development of the pupils; necessity for the teacher to study the class as well as the subject-matter of the lesson.

Means of Presentation of the Lesson: Language as the medium of the transmission of experience; lecture, text-book, and question-and-answer methods of presentation; advantages and limitations of each; graphic representation as a means of presentation; principles governing the successful use of natural objects, pictures, models, maps, diagrams, etc.

The Aim of the Lesson: Aim of lesson from the teacher's standpoint; aim of lesson from the pupil's standpoint; tendencies as the starting point in the growth of knowledge or the acquisition of skill; relation of the child's interest to native instincts and capacities and to the development of aims and purposes; the relation of interest to self-activity; the use of interest in the school-room; the normal attitude of the learner as an attitude of enquiry; the necessity for connecting the lesson with some pre-existing need of the child or of making it fit into some of his purposes or plans; the place of the statement of the aim of the lesson; the nature and purpose of the preview.

Preparation of the Class for the Lesson: Necessity for revival, and reconstruction of the old experiences of the pupil in giving meaning to the new lesson; the aim of the lesson as a purpose in the recall of old experiences; means of recalling and utilizing old experiences in the presentation of the new lesson.

Development of the Lesson: The effect of the preview, the statement of the aim and the preliminary stage of preparation to fix in the mind of the learner a vague mental whole within which mental movement in the lesson takes place; the purpose of the development of the lesson to give definiteness to this whole; the development as

a process of analysis, focussing attention on particular phases within the whole, and of synthesis, instituting relations among these particulars; typical illustrations from varied subjects to show the meaning and the universality of application of this principle; the interdependence of analysis and synthesis; learning as an analytic-synthetic process; the place of comparison and contrast in the development of the lesson.

The analytic phase in learning; the principle of selection of relevant analysis; the place of sense-perception, telling and inference in the development of individual notions; meaning of "analytic methods" of teaching.

The synthetic phase in learning; the adaption and use of selected material; the development and application of universal notions; meaning of "synthetic methods" of teaching; inductive and deductive methods of teaching.

Expression as a Stage in Method: Necessity for expression as a stage in rational method; interdependence of impression and expression; the importance of this interdependence as the basis for the constructive side of school work.

Typical Lesson Forms: The study lesson; the recitation lesson; the development lesson; the drill lesson; the review lesson; the construction of lesson plans.

Teaching Devices: Use of questioning in the development of the lesson; right and wrong methods of questioning; examination of the so-callled Socratic method; answers; qualities of a good answer; treatment of faulty answers; mistakes in dealing with answers; illustrations; their office and value; uses of the blackboard.

Books of Reference:—

McMurry: *The Method of the Recitation*, 75 cts.

Bagley: The Educative Process.

History of Education.

22. The object of the course in the History of Education is to widen the professional outlook and rationalize school practice through the discusssion of the development and of the merits and the defects of educational theories. It presupposes an historical background and discusses movements rather than individuals. The course includes the following topics:—

Outline of the History of Education prior to the Fifteenth Century: This should be a *brief* survey of those conditions and forces which were specially significant in determining later important movements. It should contain concise references to the following topics: Education in its simplest forms among primitive peoples; the rise of the teaching class and the beginnings of school organization; the aim, organization, content and effect of Spartan, Athenian, and Roman education; the educational theories of Socrates, Plato and Aristotle; the influence of Christian doctrines in educational thought and practice; the early Christian schools; Monasticism and Education; the development of Scholasticism; organization and influence of the early Universities; the educational system of Chivalry; the influence of Saracen learning.

The Renaissance: The leading tendencies of the Renaissance as a movement; the origin of these tendencies; conditions favoring the development of the movement: its history in Italy and in Teutonic countries; the work of Petrarch, Boccaccio and the Byzantine Greek teachers, the effects of the Renaissance in determining educational ideals and practice; the content and method of earlier and later humanistic education; educational leaders of the humanistic movement; the work and influence of Vittorino da Feltre, Erasmus, Ascham, and Sturm; the influence of the Renaissance on the organization of schools, typical humanistic schools; the German gymnasium, the English Public School, and the Colonial grammar school.

Reformation and Counter-reformation: Relation of the Reformation to the Renaissance; the reformation movement in its relation to the development of elementary and secondary education in Europe; Luther and elementary education in Germany; rise of state supported and controlled systems of education; the educational tendencies of the counter reformation; the educational works of the Jesuit order; subject matter, method and organization in Jesuit schools; training of teachers in the Jesuit order; the Port Royal schools; their aim, organization, curriculum, and methods; their influence; the Christian Brothers and elementary education in Roman Catholic countries.

Realistic Education: The development of Realism as an educational movement; its relation to Humanism; humanistic realism as represented by Rabelais and Milton; social realism as represented by Montaigne; sense-realism as represented by Ratich, Bacon, Mulcaster and Comenius; Bacon's "new method" for the discovery of truth; the influence of his theories on education; Comenius' conception of the purpose, content, method and organization of education, compared with modern ideals; brief account of his life and works; his place in education.

Disciplinary Conception of Education: Essential features of the modern disciplinary conception of education; its origin; strength and weakness of the theory; the educational theories of John Locke; his relation to disciplinary education and to later movements.

Education according to Nature: Relation of naturalistic tendencies in education to previous movements and to the condition of the times; history of the development of these tendencies; examination of Roussseau's educational theories as developed in the "Emile;" permanent results of his influence.

Modern Educational Theories: The Psychological ideal as represented in Pestalozzi; character and significance of the Pestalozzian movement; brief account of the life and works of Pestalozzi; formulation of his educational principles; his influence on education; the Herbartian movement; its relation to Pestalozzianism; Herbart's conception of the purpose, the means and the method of education; the doctrine of the correlation of studies; general characteristic of the Frœbelian movement; brief account of Frœbel's life and work; his educational theories as embodied in the Kindergarten; his influence on educational practice.

Scientific tendencies in education; theory of education as formulated by Herbert Spencer.

Contemporary tendencies in education; sociological tendencies of present day education; origin of the sociological movement, its place in previous movements; the development of public education in Ontario.

Books of Reference:—

Monroe: *A Brief Course in the History of Education*, $1.00.
Quick: Educational Reformers.
Kemp: History of Education.

School Organization and Management.

23. The object of the course is to give the teacher, in the light of the Science of Education, a knowledge of the technique of school management and organization which will enable him to secure the smooth and efficient working of his school. The course includes the folllowing topics:—

School Monagement: Its scope and its relation to the Science of Education.

The Teacher: Natural qualifications of a good teacher; importance of scholarship, of training, of experience, of professional studies, of wide culture, of sense of responsibility, and of earnestness of purpose; the teacher's relations to the principal, inspector, trustees, parents; his civic and social duties; his personal power and influence in the school and in the community; his daily preparation for teaching; the care of his health.

Classification: Principles governing the classification of pupils in the school; the advantages and disadvantages of graded and ungraded schools; number and size of classes in urban and rural schools; examination of various methods of promotion; the division of subjects and pupils among the several teachers in graded schools.

Daily Programme: Its purpose and value; principles involved in the construction of a time-table: seat work; individual blackboard work; question of fatigue; typical time-tables for graded and for ungraded schools; registration and school records.

Technique of Class Instruction: Characteristics of a good lesson; common defects in class instruction; effects of over-teaching; advantages of class instruction; defects of a rigid class instruction; the value of the individual system; examination of various systems of compromise between class and individual instruction.

School-room Routine: Chief varieties of mechanizing routine; their advantages and disadvantages; the appointment and duties of monitors; fire drill.

Desirable School Habits: Methods of securing desirable school habits such as punctuality, neatness in person and in work, accuracy, quietness, industry, obedience, etc.

Order and Discipline: Characteristics of good order; the relation of authority to discipline; the chief elements of governing power; rules, their value and enforcement; common faults and how to avoid them; discussion of methods of dealing with typical offences; the

relation of incentives and penalties to order and discipline; co-operation of school and home in matters of discipline.

School Incentives and Penaltics: Classification of incentives; the effects of each on school work and on health and character; the values of punishment; characteristics of judicious and injudicious punishment; the discipline of consequences.

Physical Education: Relation of physical to intellectual development; importance of change of work; value of play and games; organized and unorganized play.

The School Building and Premises, and School Hygiene: The Grounds: Situation, aspect, area, drainage, ornamentation, protection, care of school gardens; water supply, its sources, impurities, modes of purification.

The Outbuildings: Location, structure, and supervision.

The School House: School architecture, size, shape, and suitability of rooms, hall, etc., importance of proper lighting; how to secure proper lighting, position of pupils with reference to windows; heating, warming by stoves, by hot air, by hot water, by steam, the advantages and disadvantages of each method, the jacketed stove; the thermometer, the hygrometer; fire escapes and like appliances; ventilation; necessity for good ventilation, signs of vitiated air, moistening of air, quantity of fresh air needed, different methods of ventilation; furniture and equipment; desks and seats; necessity of adjusting the height to the pupil; blackboards, their size, situation, and kinds; cloak rooms and clothing; maps, globes, library, and other necessary apparatus and equipment; pictures and decoration of walls. (See Departmental Circular, No. 33, and XVIII. below.)

Books of Reference:—

Bagley: Class Management.

White: School Management.

Landon: Principles and Practice of Teaching and School Management.

Special Method.

24. The courses in Special Method prepare the teachers-in-training for intelligently observing and teaching lessons in all grades of the Model Schools, by enabling them to appply the principles of education and, in particular, to adapt to the work in each subject the principles of General Method. The work in the special method of each subject is introduced by a few lessons of a general character, embracing the appplication of the principles of General Methodology to the teaching of the subject. These introductory lessons are followed by a series of a more detailed character, dealing with:

(1) The selection and the organization of material for the Public School Forms, taken in order, from the standpoint of presentation to the pupil.

(2) The discussion of special methods of instruction, concurrent with the academic review of the subject matter.

The courses shall be taken up in terms of the Public School Programme of Studies, the provisions of which shall be constantly kept in mind.

General Books of Reference:—

Carpenter, Baker and Scott: Teaching of English.
Chubb: Teaching of English.
MacClintock: Literature in the Elementary School.
Arlo Bates: Talks on the Writing of English.
Arlo Bates: Talks on the Teaching of Literature.
Hodge: Nature Study and Life.
Dearness: How to Teach Nature Study.
Silcox and Stevenson: Nature Study.
Geikie: Teaching of Geography.
Smith: Teaching of Elementary Mathematics.
Young: The Teaching of Mathmematics.

I. *Language and Composition.*

25. The special object of the course in Language and Composition is to prepare the teacher to train his pupils to speak and to write good English as a fixed, unconscious habit. The course includes the following topics:—

The importance of language training; the place of a knowledge of the mother tongue in education; the value of clearness, force and grace of expression.

Oral and written composition; Their relation; how habits of speaking and writing good English are formed; the effect of the teacher's example upon the pupil's language; value of reading and of memorizing good literature; importance of libraries for supplementary reading; use of models in written composition; influences opposed to good usage; incidental work in language training; expression as a stage in the development of every lesson; necessity for special exercises in oral and written composition.

Methods in oral and written composition. Methods of encouraging pupil's free natural expression and of extending his vocabulary through oral exercises; principles governing criticism of oral work; the dangers connected therewith and the means of avoiding them; value of formal linguistic exercises; the relation of a knowledge of grammatical rules to the development of correct forms in speech; method of correcting common errors; relative value of pupil's own language and of special exercises in false syntax as material for criticism; the principles to be kept in view in conducting exercises in written composition; supervision and aid during writing; value of topical outlines; the place of home-work in written compositions; method of correcting compositions; value of re-writing.

Mechanics of written composition. Sentence and paragraph structure; paragraph compositions; the use of capitals, punctuation marks, quotation marks, abbreviations, etc.

Materials for written and oral composition: Principles governing choice of topics; gathering, selecting and arranging material; class answers as material for oral composition; importance of framing questions that will require answers of considerable length; the reproduction of fairy and folk stories, fables, poems, biographies; relative value of reading and telling stories; transition from reproduction to originality; descriptions of personal experiences, real and imaginary;

pictures suggestive of stories, school games, autobiographies of familiar things; developing themes from minor incidents, themes connected with school studies, general themes; letter writing, with special attention to form and style; invitations and replies thereto; bills, receipts, promissory notes, etc.

II. *Reading.*

26. The special object of the course in Reading is to prepare the teacher to train his pupils to get the writer's thought and feelings (*intelligent reading*) and to communicate them to the listener so that he may appreciate them (*intelligible reading*). The course includes the following topics:—

The scope of reading: Its correlation with other subjects; importance of training in reading and the principles of vocal expression to pupil's ordinary speech and general culture; the limitations of the pupil's ability to interpret words; his previous preparation.

The processes involved in reading: The relation of ideas to symbols; the associations of visual, auditory, and motor images in reading; conditions of the formation of accurate visual and auditory impressions; constant necessity for connecting the printed symbol directly with the idea; interpretative reading; expression as conditioned by the thought and by the presence of the person to whom it is addressed.

Forms of reading: The function and value of silent reading, sight reading, dramatic reading, elocution, declamation.

Methods in reading: Examination of the various methods of teaching beginners to read; advantages and disadvantages of each; devices for securing rapid word recognition and for fixing attention on the thought as well as upon the word forms in the earlier stages; means of securing natural expressive reading; the place and limitations of imitative reading; common faults on the part of both pupil and teacher and how to correct them; criticism by teacher and by pupils. Change in purpose and methods of reading as determined by the development of the pupil's experience and powers; the necessity for giving attention to expression in all stages; the objects of advanced reading; methods of developing in pupils the habit of reading for thought and pleasure; reading as a means of creating and fostering a taste for good literature.

Mechanics of vocal expression: The necessity for attention to the principles of vocal expression: time, inflection, pitch, force, quality, pause, phrasing, emphasis, stress; and to exercises for rendering the organs of speech subservient to the will—vocalization, articulation, breathing, development of chest and lungs, vocal training for pure tone; the connection between the reading lesson and the singing lesson.

III. *Spelling.*

27. The special object of the course in Spelling is to prepare the teacher to secure accuracy in the mechanism of written word-expression. The course includes the following topics:—

Scope of spelling: Its correlation with other subjects; nature and origin of peculiarities of English orthography; causes of the

difficulties experienced by pupils in learning to spell; causes of incorrect spelling.

Methods in spelling: Necessity for teaching, not merely testing spelling; examination of the various methods of teaching spelling; the adaptation of each to the nature of the words and to the individual mental characteristics of pupils; phonic exercises and word-building in relation to spelling; syllabication; the place of transcription and dictation; methods of checking and correcting errors; value of re-writing; prevention *versus* correction; the character of drill and review exercises in spelling; methods of varying the spelling recitation; value of rules in spelling.

Materials for spelling: Principles of selection of material for spelling; grouping of words for the purpose of spelling; incidental spelling; uses of the dictionary and of the spelling book.

IV. *Literature.*

28. The special object of the course in Literature is to prepare the teacher to create in his pupils a taste for good literature, while broadening their knowledge, moulding their characters, and aiding them to appreciate the beauty and the power of artistic expression of thought and feeling. The course includes the following topics: —

The nature and elements of literature.

Selection of subject-matter for literature lessons: Qualities of literature that appeal to children of different ages; basis of selection of material for different grades; lists of suitable fairy tales, fables, nature stories, etc., adapted to children of lower grades and of general works for pupils in the highest forms; complete wholes *versus* extracts.

Methods in teaching literature: Methods of dealing with primary literature; comparison of values of reading and telling; the application of the general principles of method to the teaching of literature; method in supplementary reading contrasted with that in exact study; the extensive and intensive study of literature; the importance and method of memorizing selections; the value of oral reading in the interpretation and appreciation of literature; the importance of the teacher's own ability to read well; the futility of attempts to develop formally the critical sense.

Lesson procedure: Preparation of the pupils; necessity for preparing a suitable mood for the lesson; how far the author's biography has a place here; preliminary reading of the selection; the main thought of the lesson grasped in a more or less indefinite way through a reading of it; the analysis of a selection into its wider thought—elements and the analysis of these again into their elements; the place of explanation of words and phrases; the use of the dictionary; the relation of the subordinate thoughts to the unity of the whole, the main thought of the selection as made definite by the analysis; the oral reading of the selection by pupils after study; the value of oral and written reproduction; suitable seat work.

Examinations in literature: Difficulties of examining in literature; specimen examination questions.

Teacher's preparation: Special importance of teacher's own qualifications; a class-course in Literature, including the literary study of portions of the Bible prescribed by the Education Department; sessional private reading-courses for teachers-in-training; suggestions for their future reading.

School Library: Principles to be kept in view in selecting works for the school library; methods of making use of school library; means of securing the cooperation of the home in the pupil's reading.

Note.—Teachers-in-training having conscientious objections to the literary study of the Bible shall be excused therefrom by the Principal. Religious instruction by the different local clergymen is provided in each Normal School.

V. *Grammar.*

29. The special object of the course in Grammar is to prepare the teacher to secure precision of expression on the part of his pupils, to train them in habits of logical analysis, and to give them a basis for self-criticism in language by developing the principles of language structure. The course includes the following topics:—

Meaning of English Grammar; the relation of grammar to speech; correlation with other subjects; reasons for and against retaining it in elementary schools; reasons for deferring the formal study till Form IV.; introductory work of Form II. and III.

The sentence as the starting point; basal value of function; order and method of teaching the parts of speech; principles of classification as applied to grammar; inflection, use and value of our remaining inflections; rules of syntax, their value; use of grammatical terminology; definitions, their value, how to be obtained, how to be applied; analysis and parsing, aim and value of each; value of diagrams; oral and written exercises; treatment of false syntax.

VI. *History.*

30. The special object of the course in History is to prepare the teacher to train pupils to adapt human experiences to present situations. In the elementary stages the chief objects are to arouse an interest in historical studies, to enable the pupils to appreciate the logical sequence of events, and to give them a knowledge of their civil rights and duties; also to stimulate a love of country. The course includes the following topics:—

The scope of History: The correlation of history with other subjects, especially geography; the special value of Canadian and of British history; the proper perspective in the development of the subject; parts enlarged in the academic review; what makes an event important.

Methods: The recitation, its form and purposes, the place of oral teaching and of blackboard work by teacher, and of written exercises at seat and at blackboard by pupils; methods in oral and in written work; the use of pictures, maps, etc., of readers and of the text-book; relation of method to the personality of the teacher and his knowledge of the subject; special importance of preparation of lesson by teacher owing to masss of detail; errors to be avoided.

Stages in the course: Special necessity for the adaptation of the teaching of History to the pupil's growing knowledge and logical capacity. The picture and story stage, a methodically arranged series of picturesque biographies graphically narrated; no text-book. The information stage; an introduction to history proper, methodically presented; external and picturesque side made prominent, with emphasis on biographical and social aspects; introduction of history readers and biographies in the library. The reflective stage: the study of causal relations and of the origin, development, and inner life of our institutions.

The selection and arrangement of material suitable for different grades; the place and purpose of each of the following:—

History of the aborigines, pioneers, local history.

Characteristics of peoples, as those of the United States, Japan, China, France, Quebec.

Biography: The natural attractiveness of biography; the relation of biography to history; the effects of a study of biography on the development of character; selection of suitable biographies for pupils of different grades, as the lives of explorers, navigators, and soldiers for primary grades; of statesmen, poets, scientists, etc., as representing more complex conditions, for pupils of higher grades.

Civics: Ends to be kept in view in teaching civics; consideration of work to be undertaken in civics; study of civic institutions as appearing in their lowest forms among primitive peoples; the beginnings of governments, of courts, of school systems, of factories, of means of transportation, etc., study of present forms of civic institutions.

Epochs: Their relation to biography; systematic chronological study of history; its value and its dangers; the causal sequence of events.

Supplementary material: The use of mythology, ballads, orations, epics, legends, tales of chivalry, narrative poems, and historical novels; character of history readers and of supplementary works for the different grades. Significance and value of the Flag.

VII. *Geography.*

31. The special object of the course in Geography is to prepare the teacher to extend the pupil's knowledge of the earth and its relation to life thereon, and to assist them in interpreting and utilizing their physical environment in accordance with their needs. The course includes the following topics:—

The scope of geography; its relation to other subjects, especially to Nature Study, History, and Elementary Science.

The review of the course should lay special emphasis on the study of the earth's surface and the changes wrought thereon by the various agencies; rock formation and soils; distribution of mineral products; plant and animal life; the earth's relation to other heavenly bodies; weather and climate; man's relation to the rest of the world; commercial and political geography.

Methods: Consideration of the order of development of the subject in rural and urban schools; the use of maps, globes, pictures,

blackboard drawings, natural objects, specimens of products, lantern slides and stereoscopic views; modelling, map drawing, scales and projections; weather observations and records, simple experiments in explanation of natural phenomena (See course in Experimental Science); excursions in connection with the observations in local geography; inter-school correspondence; the use of reference library, books of travel, geography readers, etc., common mistakes in teaching geography and means of avoiding them; special importance of preparation of lesson by teacher owing to mass of details.

VIII. *Nature Study.*

32. The special object of the course in Nature Study is to broaden and deepen the teacher's sympathies and interests, and, through him, those of his pupils, by training him to observe and interpret the common phenomena of the world about him. The course includes the following topics:—

The character and scope of nature study; its relation to formal science; its correlation with other subjects.

Material for nature study: Conditions determining the choice of material for nature study lessons for pupils of different grades, and for varying conditions in rural and urban schools; uses and limitations of books, pictures, models, collections, etc.; supplementary materials such as stories, literature, etc.

Methods in nature study: Nature study as a method; special characteristics of a typical nature study lesson: uses and limitations of records of observations; directions for conducting school excursions. The study of special topics dealing with materials of nature study and illustrating methods of presentation in all grades of public schools, the topics to be typical and to be selected from various grades and departments of the Public School course of study.

School gardens: The purpose of school gardens; school gardens as a phase of nature study work; their relation to agriculture and horticulture; the discussion of the purpose and possibility of the study of agriculture and horticulture in urban and rural schools.

Practice in planning and plotting a garden; planning school grounds for tree planting in accordance with the principles of landscape gardening; preparation and planting of experimental plots in the school grounds to illustrate the benefits of rotation, fertilizing, spraying, mulching, etc.

Note.—Teachers in training should make frequent excursions for the purpose of studying materials in their natural environment and relations. They should make collections of different kinds for their own use as well as to enable them to direct as teachers the practical side of nature study. The nature of the collections will be regulated by the kind of school in which the student will likely teach; rural teachers should make collections of weeds, weed seeds, economic plants, diseased plants, injurious and benefical insects, etc.; urban teachers, of factory products, garden flowers, etc. Besides acquiring experience in planning and planting gardens, teachers in-training should visit schools where successful garden work is being done

IX. *Elementary Science.*

33. The special object of the course in Elementary Science is to give the teacher a better appreciation of its general principles, a more accurate knowledge of its facts, and greater familiarity with

apparatus; so that he may be able to teach Natural and Experimental Science systematically. The course includes the following:—

The scope of the experimental and natural sciences; their correlation with other school studies.

A comprehensive and practical review of the course in Elementary Science prescribed for the Fifth Form of the public schools, the emphasis in experimental science being placed on those facts and principles of chemistry, mechanics, heat, sound, light, and electricity which are essential to the understanding of common natural phenomena.

The construction of simple apparatus. (See Manual Training course.)

The Microscope: Its construction and use; selection and preparation of material for microscopic work, having direct reference to Bacteriology—a brief course.

Methods of teaching: The meaning and value of observation and experimentation; inductive and deductive methods of investigation; the place of class-room discusssion; demonstration by the teacher and laboratory work by the pupil; the use of note-books and text-books.

Note 1.—The work in Elementary Science should be carried on through class room discussions and laboratory work with emphasis on the latter. Teachers-in-training should become familiar with methods of experimentation and should attain skill in instrument manipulation. They should also be required to keep neat and accurate records of observation and experimental work

Note 2.—In both the Nature Study and the Elementary Science course, the subject matter of Biology should receive more attention than that of Physics and chemistry, which are subjects of the July Enterance Examination. The course in Nature Study is of more importance than that in Experimental Science.

X. *Arithmetic.*

34. The special object of the course in Arithmetic is to improve the teacher's knowledge of the subject that he may use it effectively as a means of logical training, and more particularly that he may be prepared to give his pupils such instruction in the various arithmetical processes as will enable them to make with accuracy, rapidity, and facility, the calculations and computations which their future life may render necessary. The course includes the following topics:—

The scope of arithmetic; a short history of arithmetic; its relation to the other subjects of the curriculum; importance of its practical aspects as related to the lives of the pupils; danger of overestimating its value as training in logic.

The origin of number as a result of the necessity for the valution or limitation of quantity by measurement; the various steps involved in the development of the number idea; the unit, its nature and use; the necessity for standard units; number—a ratio.

Methods in arithmetic: Analysis and synthesis, induction and deduction,—compared, illustrated, and applied; graphic methods; use of concrete material in making clear new processes and in verifying and interpreting operations performed; the use of text-books and of prescribed apparatus; the importance of training in, and devices to secure, neatness, accuracy, and speed in computation; the import-

ance, place, and treatment of oral arithmetic; the value of problems; the essentials of proper solutions; solutions by full analysis, and by performing operations only; "unitary" method and method of direct measurement; grading of problems; interest in problems for which the pupils themselves furnish the material; blackboard work; drill and examination work in arithmetic.

A thorough treatment of the various arithmetical operations and their applications with special stress upon the requirements of teachers engaged in public school work. This should include the following:—

Counting; measuring with standard units; numbers from 1 to 10, from 10 to 20, etc.; number pictures, notation and numeration; addition-tables, exercises, devices; subtraction—by decomposition, by equal additions, and by complementary additions; multiplication—relation to other operations, tables, exercises, factors, division—short and long, factoring, cancellation, division by factors; measures and multiples.

Fractions: How and when to be introduced, different interpertations, notations, rules for operations deduced and applied; decimal fractions, correspondence of methods of numeration, notation, and operations with those of integers, recurring decimals.

Applied arithmetic: Percentage, trade discount, commission, insurance, taxes, interest, discount, stocks, exchange; tables of weights and measures; the metric system; mensuration including the areas of rectangles, triangles, parallelograms, and circles, and the volume of rectangular solids, cylinders, and prisms; square root.

XI. *Algebra.*

35. The special object of the course in Algebra is to familiarize the teacher with its fundamental conceptions and to prepare him to present the various processes of the subject in the most effective way. Having regard to the fact that Algebra is Arithmetic generalized, its special object is the same as that of Arithmetic. The course includes the following topics:—

The scope of algebra; a brief history of the development of algebra; when the subject should be introduced.

Relation of algebra to arithmetic; a comparison of the nature and application of its symbols and operations with those of arithmetic; the equation as a means of connecting the subject with arithmetic and of introducing its symbols; the origin and explanation of algebraical symbols; the relation of algebra to geometry.

The use of induction, deduction, and mathematical induction in algebra.

Methods of teaching algebraic notation, addition, subtraction, multiplication, division, formulae, factoring, measures, multiples, fractions; testing algebraic operations by "checking."

The equation: Its nature; identities; the solution of equations of one and of two unknowns, and of easy quadratics; the mathematical axioms employed in these solutions; the interpretation of results; the equation applied to the solution of problems; comparison, where possible, of algebraic with arithmetical solutions.

XII. *Geometry.*

36. The special object of the course in Geometry is to prepare the teacher to train his pupils to attain skill in the use of instruments, in accurate measurements, and in drawing; and, through these, in inductive and deductive reasoning. The course includes the following topics:—

The scope of geometry; a brief history of its development; when it should be begun; methods of treatment—inductive and deductive; the relation of inductive geometry to deductive geometry; the inductive course for beginners.

Method of introducing the definitions.

The use of simple instruments, compass, protractor, divider and set square, in the measurment of lines and angles; the construction of lines and angles of given magnitude; the construction of geometrical figures.

The inductive method of proving some of the leading propositions of Euclid, through the accurate construction of figures; the deductive application of principles reached through induction.

Throughout the course, accuracy in construction shall be insisted upon as coordinate with exactness of thought.

XIII. *Writing and Book-keeping.*

37. The object of the course in Writing is to train the teacher to write rapidly and legibly, and to make him familiar with the best means of securing the most satisfactory results in the teaching of the subject. The course includes the following topics:—

The purpose of writing; its correlation with other subjects.

Historic methods of teaching writing; copying methods; constructive methods; styles of writing in use at different periods.

Penholding; position at the desk; position of the paper; the proper formation of the small and the capital letters and the figures; various movement exercises; practice on paper and on the blackboard.

Use of headlines and copybooks; use of blank paper; its ruling; value of transcription, dictation, and composition in writing; use of the blackboard to teach the correct form of each letter singly and in combination; how general and individual faults are corrrected; the formation of a characteristic hand; how to deal with pupils having some physical disability.

A brief review of the Lower School course in Book-keeping, also affording practice in writing.

Note.—After the teacher-in-training has mastered in class the proper formaction of the letters, etc., and the movement exercises, the master should require him to hand in from time to time exercises for criticism until his handwriting is satisfactory.

The writing in the Schools is so generally defective that the subject must receive special emphasis.

XIV. *Art Work.*

38. The special object of the course in Art is to give the teacher such a knowledge of the subject, such a training of his aesthetic nature, and such facility in the use of Art as a means of expression,

as will enable him to develop like tastes and powers in his pupils. The course includes the following topics:—

The scope of art; art as a mode of expression and a means of æsthetic culture; its correlation with other subjects in the school course.

Freehand Drawing: How to use the various mediums, pencil, charcoal, crayons, ink with pen or brush; the drawing of common flat objects such as leaves, grasses, brooms, shovels, saws, hammers in an appropriate medium; the drawing of common spherical, cylindrical, and rectangular solids, illustrating the principles of freehand perspective; the grouping of objects; simple landscapes from nature and imagination; illustration of games, occupations, nursery rhymes and stories; pose drawing; drawing from casts.

Blackboard Drawing: The use of white, black, and coloured crayons on the blackboard and on large pieces of paper; rapid illustrative sketches to aid in the teaching of all subjects; blackboard drawing specially important to the teacher as a means of expression.

Water Colours: Theory of colour; the solar spectrum; the six standard colours, red, orange, yellow, green, blue, and violet; the intermediate hues, red-orange, yellow-orange, yellow-green, blue-green, blue-violet and red-violet; the tints and shades of each colour in graduated scales; the pigmentary theory; primary, secondary, and tertiary colours; complementary colours; colour harmony, dominant, analogous, and complementary; the neutral value scale; the making and applying of graduated and uniform washes; the representation in colour, neutral values, and sepia, of leaves, grasses, flowers, fruits, trees, insects, pet animals, birds, and common objects; the grouping of objects; simple landscapes from nature and imagination; elementary composition of pictures.

Decorative Design: The principles that determine the rhythm, balance, and harmony of tones, measures, and shapes; borders, surface designs, designing of Christmas cards, programmes, book covers; lettering; designs to be done in netural value first and then carried out in colour.

A short course outlining the development of architecture and ornament, to be taken up in four lectures illustrated with pictures and lantern slides.

How to study a picture; the critical study of a few masterpieces of painting.

Books of Reference:—

Prang's *Text Books of Art Education;* 7 books, $2.40.

XV. *Manual Training.*

39. The special value of the course in Manual Training is to train the teacher to appreciate the educational value of various forms of Constructive Work, and to select and use in the most effective way constructive exercises in the varying conditions of urban and rural schools. The course includes the following topics:—

The scope of Manual Training; its correlation with other subjects in the curriculum; discussion of the ways in which materials

and operations may be made to meet the demands of the child in the different grades of rural and urban Schools; the selection of exercises based on the requirements of the school and the home; outlines of courses in the different forms of hand-work. The practical course includes the following with concurrent methodology:—

Drawing: Use of drawing instruments; a short course in mechanical drawing with and without instruments; plans and blue prints.

Paper and Cardboard Work: Paper folding and cutting; bookbinding, simple repair of books; trimming and mounting of pictures.

Basket and Rafia work.

Modelling: Materials used for modelling and how these are kept; modelling natural forms; plotting; modelling as a means of teaching geographical concepts; supplementing observation of the topography of school neighborhood; supplementing word pictures in readers, etc.; models used in conjunction with drawing, etc.; in teaching principles of design.

Woodwork: Tools and how to keep them in good working order; designing; a short course in bench work; uses of woods and their suitability to such uses; methods of wood finishing.

The construction of simple forms of school apparatus in wood, metal, glass, and their combinations.

Co-operative exercises in the above forms of work.

XVI. *Household Science.*

40. The special object of the course in Household Science is to enable the teacher to relate the work of the school to the activities of the home. It is a form of Manual Training, and possesses the same educational value. The course includes the following topics, with concurrent methodology.

The Home: Purpose; use, furnishing, and care of each room; methods of cleaning; ventilation.

Foods: Elements of food requird by the body; digestibility of these; analysis of common foods—milk, eggs, meat, fruit, vegetables, cereals; effect of heat on these as to food value, digestibility, and flavour.

Cookery: Principles of combustion; care of stoves; fuels; principles and practice of each method of cooking—boiling, simmering, steaming, steeping, toasting, broiling, frying, baking, etc.; food combinations; flour mixtures; lightening agents used in these; table service.

Bacteriology: Occurrence and nature of bacteria; sanitation based on this knowledge; preservation of foods.

Needle Work: A study of each stitch on different textures and fabrics; application of these in making simple articles, as bags, aprons, handkerchiefs, needle-cases, towels, etc.; mending, darning, patching, using different textures and fabrics; button-hole making, sewing on buttons, hooks and eyes; colour combinations; taking measurements and drafting patterns; making dolls' clothes; making simple garments and underclothing.

XVII. *Music.*

41. The special object of the course in Music is to train the teacher in the use of Music as a means of self-expression and of aesthetic culture. The course includes the following topics:—

Tune: Practice in singing from the staff and tonic-solfa modulators; intervals of moderate difficulty, contained in the major diatonic scales; modulation from any given key to its relative minor, and its dominant and subdominant.

Time: Practice in singing rhythmical studies in simple or compound duple, triple, or quadruple times; the pulse as the unit of measurement in time, with its divisions into halves, quarters, or thirds in varied combination.

Ear Training: Development of the power to recognize by ear, and to transcribe the tonal and rhythmic elements of short musical phrases, when sung or played.

Voice culture: Practice in correct tone production; vowel formation; enunciation of consonants; breath control; correct intonation; and the equalization of the various registers of the voice.

Songs: The study of songs suited to the requirements of pupils in all grades of public and separate Schools, with special attention to development of power in musical expression; the study of part songs of recognized merit, arranged for adult voices.

Notation: Elements of notation, both tonic-solfa and staff; the formation of the major and minor diatonic scales; elements of modulation and transposition.

Vocal Physiology: Comparison of abdominal, intercostal, and clavicular-breathing; the larynx; action of the vocal chords in the production of the various vocal registers; influence of the mouth and nasal cavities on vocal resonance and vowel quality.

Methods: Concurrently with the foregoing course, a practical knowledge of recognized systems of teaching the tonic-solfa and staff notations shall be acquired; also of the relative importance of the staff and tonic-solfa systems and the grading of musical studies.

Note.—Teachers-in-training who, from any cause, consider themselves incapable of learning to sing should present their cases to the teacher of Music at the beginning of the term. If, on examination, it should be found necessary, special instruction will be provided, adapted to their needs; and their efforts to overcome any natural disability which may be found to exist, will be taken into account at the oral examination at the close of the term. The written examinations, however, are compulsory for all students.

XVIII. *Physiology and Hygiene.*

42. The object of the course in Physiology and Hygiene is to train the teacher in the knowledge requisite for the maintenance of the health of both himself and his pupils, and to qualify him for supervising the sanitary conditions of the school and its surroundings. The course includes the following topics.—

School Hygiene: School sanitation. (See under School Management, p. 21.)

Contagious and Infectious Diseases: Common facts of bacteriology, how to detect existence of common infectious and contagious diseases; modes of preventing spread of these diseases; sanitary legislation; duties of the teacher.

Personal Hygiene (with the necessary minimum of anatomy); Framework of the body; spinal curvature, its causes. Digestive system; foods, care of teeth; saliva. Physiology of respiration and circulation. Skin and other depuratory organs, hair, nails, bathing, clothing, etc. Muscles; the relation of exercise to health. Brain and nervous system; relation of mind to body; mental exercise; study; rules regarding mental work; irregular and overwork; mental strain and worry. Effects of alcohol, tobacco, etc., on organs and functions.

The eye: Its physiology and hygiene; lighting; myopia and presbyopia; affections produced by improper accommodation; colour blindness; tests for defctive eyesight.

The ear, the nose, and the throat; Their physiology and hygiene; ear and throat troubles, causing dulness in pupils; tests for defective hearing and breathing.

Accidents and emergencies: First aid in such cases as fainting, suffocation, drowning, hemorrhage, fractures and dislocations, venomous stings, poisoning, frost-bites, sunstrokes and heat-stroke, burns; bandaging.

Book of Reference:—

Knight: Introductory Physiology and Hygiene.

XIX. *Physical Training.*

43. The special object of the course in Physical Culture is to enable the teacher to make proper provision for the physical training of his pupils. With Physiology and Hygiene (School and Personal) as a basis, it prescribes and directs rational forms of exercises for the attainment and maintenance of health, the development of a symmetrical body, and the formation of habits of grace and ease in muscular movement. To this end the teacher-in-training should be made familiar with the German, Swedish, French (Delsarte), and American systems of physical training. The course includes:—

Breathing exercises: Running, hopping, quick walking.

Leg exercises: Standing positions, fundamental stride, etc.; standing with flexions of ankles and knees; fall-outs; charges; fencing positions and kneelings.

Arm exercises: Starting position, hands at side, at shoulders, at thrust, at upward bend, at formal bend; movements of raising, swinging, rotation, circling, flexion, and intension.

Neck and trunk exercises: Flexion, extension, and rotation.

Free exercises: All the simpler forms from fundamental positions; also compound movements of two parts in the same, opposite, and right-angled directions.

Tactics: Facings and steppings; marching in various formations of rank, file, column, etc.; fancy steps, following and changing steps, etc.; running.

Special exercises for correcting the individual defects that may be found among children.

Recreative gymnastics, or gymnastic games; indoor and outdoor games.

XX. *School Law and Regulations.*

44. The Ontario School Law and Regulations so far as they deal with the duties and obligations of teachers and pupils.

XXI. *Manners.*

45. A course in Manners. Especial care shall be taken that, while in attendance, the teachers-in-training shall observe the rules of courtesy and social etiquette.

BOOK OF REFERENCE:—
Practical Etiquette.

Normal Model Schools.

46.—(1) The terms of the Normal Model Schools shall correspond with those of the Public Schools in cities. The regulations of the Education Department with regard to pupils and teachers in Public Schools shall apply to the teaching staff and to pupils of the Model Schools, subject to any modifications that may be made from time to time by the Minister of Education.

(2) The Head Master of each Normal Model School and the Director of the Provincial Kindergarten shall act under the direction of the Principal of the Normal School to which their respective departments are attached, and shall be responsible to him for the order, discipline, and progress of the pupils, and also for the accuracy and usefulness of the lessons conducted by the teachers-in-training.

The Kindergarten.

THE PURPOSE OF THE KINDERGARTEN.

47. The purpose of the Kindergarten Course is to prepare the teacher in the theory and the art of organizing, governing, and instructing the pupils of the Kindergarten.

The Kindergarten combines the nurture of the home with the rational discipline of the School, and thus forms the necessary introduction to the Primary School. Through the Songs, Games, and Stories, ideals of right living on the plane of the child's life, are made clear and self-compelling; and, through the Material, the intellectual powers are nourished, the senses are trained, interest is stimulated, constructive imagination is cultivated, and a basis is laid for the formation of good intellectual, moral, and physical habits. The Kindergarten thus preserves the freedom and play spirit of early childhood and at the same time prepares the child to be an intelligent, orderly, and industrious pupil of the school.

TRAINING SCHOOLS.

48. The Provincial Kindergarten for the training of Directors are situated at Ottawa and Toronto. Any Public School Kindergarten may train Assistants.

Sessions and Terms.

49. The Session of the Kindergarten will begin on the third Tuesday of September and end on the 30th day of June; and will consist of two terms: the first from the opening of the school until the 22nd day of December, and the second from the 3rd day of January until the 30th day of June.

Grades of Certificates.

50. The Education Department issues two grades of certificates: Assistants' certificates, valid for two years, and Director's certificates, valid during good conduct. No one without a Director's certificate is eligible to take charge of a Kindergarten.

Conditions of Admission for Assistants.

51.—(1) Application for admission to the course of training for Assistants shall be made to the Director in charge of the Kindergarten, not later than the second Tuesday of September.

Each applicant shall send with the application:

(*a*) A certificate from competent authority that she will be at least eighteen years of age on or before the close of the Session.

(*b*) Her certificate of having passed the July Departmental Examination for Entrance into the Normal Schools.

(*c*) A deposit of $5, which will be returned to the teacher-in-training before the end of October, but which will be forfeited if the applicant fails to attend without giving satisfactory notice of withdrawal before the opening of the Training School.

(2) Each applicant on presenting herself at a Training School shall submit to the Director thereof:—

(*a*) A certificate from the Principal of an Approved School that she has completed satisfactorily the subjects of the Lower School prescribed for the Normal School Entrance Examination. Failing this certificate, she shall pass at the Normal School in September immediately before beginning of the session, the examination prescribed in 5 (3), pp. 4-5.

(*b*) Proof that she is able to sing, and to play simple music at sight on the piano or organ.

(*c*) A certificate from a clergyman or other competent authority that she is of good moral character.

(*d*) A certificate from a physician that she is physically able for the work of a teacher, and especially that she is free from serious pulmonary affection and from seriously defective eyesight and hearing.

(3) A teacher-in-training who, in the opinion of the Director, is unduly defective in scholarship or in natural aptitude, or whose progress or conduct is unsatisfactory, may be dismissed by the Director at any time during the session from further attendance at the Training School.

Conditions of Admission for Directors.

52.—(1) Application for admission to the course in training for Directors shall be made to the Deputy Minister of Education, not later than the second Tuesday of September, on a form to be supplied by the Department of Education.

Applicants must be the holders of Assistants' Certificates or have a Second Class Professional Certificate.

Certificates and Examinations.

I. *Assistants.*

53.—(1) Any person who attends a Kindergarten for one year and completes satisfactorily the course prescribed for Assistants may, on the recommendation of the Director of such Kindergarten, endorsed by the Public School Inspector in whose inspectorate the Kindergarten is situated, be granted an Assistant's Certificate.

(2) The examination for Assistants shall include four papers:—One on the Theory and Practice of the Gifts, one on the theory and practice of the Occupations, one on Songs, Games, and Stories, and one on Methods, each paper valued at 300, and book work at 1,200.

(3) There shall be one Sessional Examination conducted by the Training Kindergartner, and a final examination conducted by the committee of Directors appointed from the Kindergartners of the Province by the Education Department.

(4) The number of marks allowed for these examinations shall be one-fifth of the maximum for each paper at the Sessional examination, one-fifth for the Sessional records, and the remainder for the Final examination.

(5) Any candidate who obtains 40 per cent. of the marks in each subject, and 60 per cent. of the total marks, shall be entitled to an Assistant's Certificate.

II. *Directors.*

54.—(1) The holder of an Assistant's Certificate or the holder of a Second Class Provincial Certificate, on attending a Provincial Kindergarten for one year, and on passing the prescribed examinations, may be granted a Director's Certificate.

(2) The examination for Directors shall include six papers,—Psychology and the Philosophy of Froebel as embodied in his teaching, History of Education, Theory and Practice of the Gifts and Occupations, Mutter and Kose-lieder, Nature Study, and Child Study and Methods, each valued at 300.

(3) There shall be one sessional examination and one final examination conducted by the staff and by the Principal of the Normal School.

(4) The number of marks allowed for these examinations shall be one-fifth of the maximum for each paper at the sessional examina-

tion, one-fifth for the sessional records, and the remainder for the final examination.

(5) The marks counted in estimating the final standing of the teacher-in-training in Observation and Practice-teaching shall be those awarded her in these subjects during the Session and more especially towards the close thereof, after an introductory course of lessons in each. The maximum marks for Practice-teaching and Observation shall be 900.

(6) In the case of students taking the entire course in one year, a maximum of 1,200 may be awarded for Book-work.

(7) There shall be sessional examinations in Music, Art, and Physical Culture, each valued at 100.

(8) Any candidate who obtains 40 per cent. of the marks in each subject, 60 per cent. of the marks for teaching, and 60 per cent. of the total of the marks, may be awarded a Director's Certificate.